

Rejections Under 35 U.S.C. §103 - Claims 13, 17-30 and 35-41

On page 2 of the Office Action, the PTO has rejected claims 13, 17-30 and 35-41 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,928,737 to Hammer *et al.* (hereafter "Hammer") in view of U.S. Patent 5,928,739 to Pophausen *et al.* (hereafter "Pophausen"). Applicants respectfully traverse this rejection for the reasons set forth below.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, a prior art reference (or references) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in Applicants' disclosure. *In re Vaeck*, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

Here, Applicants submit that the PTO fails to establish *any* motivation to combine Hammer and Pophausen. In the rejection, the PTO stated that :

"Hammer et al. discloses a seamless, tubular food casing which is blown in an area ratio from 1:2 to 1:10 (see col. 2, lines 19-23), produced from a thermoplastic mixture which comprises a) thermoplastic starch (see col. 2, lines 16-18) and b) at least one other polymer (see col. 3, lines 49-54). However, Hammer et al. fails to disclose the polymer consisting of a polyesterurethane. Pophusen et al. teaches in the analogous art a polymer consisting of a polyesterurethane (see col. 3, lines 23-25) for the purpose of producing a food casing."

In the following sentence, without establishing any suggestion or motivation whatsoever for combining the references, the PTO reached the conclusion that:

"[I]t would have been obvious to one of ordinary skill in the art at the time applicant's invention was made to have provided a polyesterurethane in Hammer et al. as suggested by Pophusen et al. in order to produce a food casing." Applicants traverse this rejection.

As stated in *In re Dembiczak*, 50 U.S.P.Q.2d 1614 (Fed. Cir. 1999), while evidence of a motivation to combine may flow from the prior art references themselves, knowledge of one of ordinary skill in the art, or in some cases, from the nature of the problem to be solved, a rejection must be substantiated by "actual evidence" of a motivation to combine. *Id.* Moreover, as stated in *In re Rouffet*, 47 U.S.P.Q.2d 1453, 1459 (Fed. Cir. 1998), a high level of skill will not by itself supply a motivation to combine. Thus, even if it is assumed that the level of skill in the relevant art is high, this does not provide the requisite motivation to combine where actual evidence is lacking. Further, even assuming *arguendo* that the cited references could be combined, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990). Finally, Applicants note that a mere statement that modifications of the prior art to meet the claimed invention would have been "well within the ordinary skill of the art at the time the claimed invention was made" because the references relied upon teach that all aspects of the claimed invention were individually known in the art (and Applicants do not submit here that they were) is not sufficient to establish a prima facie case of obviousness without some objective reason to combine the teachings of the references. *Ex parte Levengood*, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993). See also *In re Kotzab*, 217 F.3d 1365, 1371, 55 USPQ2d 1313, 1318 (Fed. Cir. 2000).

Since the rejection lacks any motivation for combining the cited references, Applicants submit that the rejection is improper and should be withdrawn.

In addition to the foregoing, Applicants submit that Hammer fails to teach or fairly suggest a food casing produced from a) thermoplastic starch, a thermoplastic starch derivative or a mixture thereof and b) the specifically claimed polymers with "a weight ratio of a):b:) being in a range from 90:10 to 10:90" as set forth in claim 13. Pophusen adds nothing to resolve this deficiency in Hammer. Thus, neither Hammer nor Pophusen, taken either individually or in combination, teach or properly suggest a food casing produced from a) thermoplastic starch, a thermoplastic starch derivative or a mixture thereof and b) the specifically claimed polymers with "a weight ratio of a):b:) being in a range from 90:10 to 10:90" as set forth in claim 13. Accordingly, Applicants submit that the rejection of claim 13 is improper and should be withdrawn.

In conclusion, the outstanding rejection (1) fails to establish a motivation for combining the cited references and (2) fails to teach or properly suggest all of the features of independent claim 13 from which the remainder of the pending claims depend. For these reasons the rejection under 35 U.S.C. §103 is improper and should be withdrawn.

In addition to the remarks *supra* and in response to the PTO's comments regarding product by process claims 39 and 40, Applicants note that the specification, in the first sentence of the paragraph bridging pages 6-7, states that the preparations "make [the tubular casings] more suitable for ... various applications". Then, in the first full paragraph on page 7, the specification provides examples of how the preparations may effect the properties of the final product, e.g. by imparting mold resistance properties, changing the surface roughness properties, changing the printability properties, etc. Thus, inasmuch as the preparations change the physical properties of the product, Applicants submit that the PTO's failure to consider this feature is improper. Further, since the step of extruding through an annular die and blowing in an area ratio of from 1:2 to 1:10 affects the properties of the resultant product, Applicants submit that the PTO's failure to consider this feature of the claims is also improper.

In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of this rejection under 35 U.S.C. §103.

Rejections Under 35 U.S.C. §103 - Claims 14-16 and 31-34

On page 4 of the Office Action, the PTO has rejected claims 14-16 under 35 U.S.C. §103(a) as being unpatentable over Hammer in view of U.S. Patent 6,406,530 to Bengs *et al.* (hereafter "Bengs"). On page 4 of the Office Action, the PTO has rejected claims 31-34 under 35 U.S.C. §103(a) as being unpatentable over Hammer in view of U.S. Patent 4,410,011 to Andrä *et al.* (hereafter "Andrä"). Applicants respectfully traverse this rejection for the reasons set forth below.

As discussed *supra*, in order to establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 180 USPQ 580 (CCPA 1974). See MPEP §2143.03. Here, neither Hammer, Bengs nor Andrä, taken either individually or in combination, teach or properly suggest a

seamless, tubular food casing produced from a thermoplastic mixture which comprises "at least one other polymer selected from the group consisting of a homo- or copolymer comprising hydroxycarboxylic acid units, a polyesterurethane, a polyetherurethane, a polyesteretherurethane and a polyalkylene carbonate of the formula $-\text{CHR}^1-\text{CHR}^2-\text{O}-\text{CO}-\text{O}-\text{I}_n$, where R^1 and R^2 independently of one another are a hydrogen atom or a (C_1-C_4) alkyl radical and n is an integer from 10 to 5000" as recited in claim 13 from which claims 14-16 and 31-34 ultimately depend. For this reason, Applicants submit that the rejections of claims 14-16 and 31-34 based (1) on Hammer and Bengs and (2) on Hammer and Andrä are improper and should be withdrawn.

With particular regard to the rejection based on Hammer and Andrä and in addition to the foregoing, Applicants submit that the PTO has failed to established a proper motivation for combining these references. Specifically, Andrä relates to a tubular food casing comprising a web of material comprising a naturally occurring polymer curved along its longitudinal axis such that the edge regions are overlapping, a layer of a substantially water-insoluble adhesion-promoting resin covering the inside and/or outside of the web at least in the area of the edge regions, a strip of film applied to the longitudinal edge regions, and layer of a pressure-sensitive adhesive interposed between the strip of film and the edge regions of the web material (col. 3, lines 43-63). It is the layer of the pressure-sensitive adhesive which may comprise a filler, such as kaolin, glass beads etc (col. 13, lines 40-44). A seamless casing as presently claimed does not have or need any adhesive layers. A person of ordinary skill in the art of making food casings thus would not have found any motivation to employ the fillers as taught by Andrä in the seamless sausage casing of Hammer since there is no need for such an adhesive. The combination as suggested in the Office Action is thus improper and should be withdrawn.


In view of the foregoing, Applicants respectfully request reconsideration and withdrawal of the rejections of these claims under §103.

CONCLUSION

In view of the foregoing remarks, Applicants respectfully submit that all of the pending claims are now in condition for allowance. An early notice to this effect is earnestly solicited. If there are any questions regarding the application, the Examiner is invited to contact the undersigned at the number below.

Respectfully submitted,

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By 

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